



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,816	09/15/2003	David J. Muchow	08686.0005	7360
22852	7590	11/03/2006	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			KAPLAN, HAL IRA	
		ART UNIT	PAPER NUMBER	
			2836	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/661,816	MUCHOW ET AL.	
	Examiner Hal I. Kaplan	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 August 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 65 and 142-175 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 65, 142, 143, 145-147, 151, 152, 154-158, 160, 161, 166, 167 and 169-175 is/are rejected.  
 7) Claim(s) 144, 148-150, 153, 159, 162-165 and 168 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 15 September 2003 and 28 August 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing with multiple poles, supplemental poles, and wind powered generating devices, wherein one is coupled to each pole and supplemental pole, as claimed in claims 152 and 167, and the power generating devices coupled so they extend in at least four different directions from the housing, as claimed in claims 155, 170, and 175, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 2836

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claims 152, 155, 156, 167, and 172 are objected to because of the following informalities: Claim 152, line 3 contains the phrase "each at least one pole and at least one supplemental pole". It appears this should be "each pole and supplemental pole". Claim 155, lines 5-6 contain the phrase "coupling the at least one of the wind power ... and the solar power generating device". It appears this should be "coupling the wind power ... or the solar power generating device". Claim 156, line 3 contains the phrase "coupled from". It appears this should be "coupled to". Claim 167, lines 2-3 contain the phrase "device is coupled to each at least one pole and at least one supplemental pole". It appears this should be "device coupled to each pole and supplemental pole". Claim 172, line 7 contains the phrase "the coupling of". It appears this should be "wherein the coupling of". Claim 172, line 19 contains the phrase "storing includes storing". It appears this should be "storing including storing". Appropriate correction is required.

3. Claim 169 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 169 recites the limitation "the plurality of power generating devices are coupled to at least three surfaces of the housing". All of the power generating devices will be coupled to all surfaces of the housing, whether directly or through one or more of the other surfaces.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 143, 145, 151, 152, 155, 166, 167, 169, 170, and 175 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 143 and 145 recite the limitations "the coupling ... includes modifying the housing from a shipping condition in which the housing has a plurality of substantially flush outer sides" and "a shipping condition ... that includes substantially flush outer housing sides". The specification does not describe a plurality of substantially flush outer sides, and the claim does not recite what the outer sides are substantially flush with respect to. The specification defines the shipping condition as the condition wherein all exterior components are removed from the housing (see paragraph 55, lines 6-7). This constitutes new matter.

Claims 151 and 166 recite the limitation "the at least one pole and the at least one supplemental pole being separated by a predetermined distance". The specification does not disclose the pole and supplemental pole being separated, or a

Art Unit: 2836

predetermined distance. The disclosed pole (22) and supplemental pole (136) are in contact with each other and are therefore not separated. This constitutes new matter.

Claims 152 and 167 recite the limitation "coupling a wind powered generating device to each at least one pole and at least one supplemental pole". The specification does not describe more than one pole, supplemental pole, or wind powered generating device. This constitutes new matter.

Claims 155, 170, and 175 recite the limitation "the at least one of the wind power generating device and the solar power generating device ... extend[s] in at least four different directions from the housing". The specification does not describe the wind and/or solar power generating devices extending in at least four different directions from the housing. In addition, it is not clear whether each of the power generating devices must extend in at least four different directions, or whether the power generating devices together must extend in at least four different directions. This constitutes new matter.

Claim 169 recites the limitation "the plurality of power generating devices are coupled to at least three surfaces of the housing". The specification does not appear to describe coupling the plurality of power generating devices to at least three surfaces of the housing. For purposes of this Office Action, the Examiner has assumed that the phrase "coupled to" means in contact with or connected to in any way, whether directly or through another device or apparatus.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 146, 160, 167, and 172-175 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claims 146, 160, and 172, the phrase "substantially all components" renders the claim indefinite because it is unclear how many components must be able to fit inside the housing in order to read on the claimed invention. See MPEP § 2173.05(d). Claims 173-175 inherit this deficiency.

9. Claim 167 recites the limitation "the plurality of power generating devices includes a wind power device is coupled to each at least one pole and at least one supplemental pole". It is not clear what exactly is being claimed. For purposes of this Office Action, the Examiner has assumed that each pole and supplemental pole has a corresponding wind power device coupled to it.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 65, 142, 143, 145-147, 154, 156-158, 160, 161, 169, and 171 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Culbertson et al. (1,018,569) in view of the article "STS-75",  
<http://science.ksc.nasa.gov/shuttle/missions/sts-75/mission-sts-75.html>, 1996 ("STS-75").

As to Claims 65 and 156, Culbertson, drawn to a low-cost shuttle-derived space station, discloses a method of transporting and assembling a power station, comprising: a plurality of power generating devices (105) and a plurality of coupling components (inherent; see Figure 1) within a housing (106); transporting the housing (1) to a desired location; coupling the plurality of power generating devices (105) to an outer surface of the housing (106) using the plurality of coupling components (see Figure 1); receiving power from the plurality of power generating devices; and providing access to the received power (see column 6, lines 56-68). Culbertson does not disclose at least two different types of power generating devices.

STS-75 discloses a power generating device and coupling components (tether) stored in the same housing, from which it can be removed (see page 2, lines 16-18 and 26)). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to connect a tether to the system of Culbertson, in addition to the solar panels, to allow experiments to be conducted using a satellite.

As to claims 142 and 157, the device of Culbertson provides access to the received power in a plurality of different electrical configurations (different configurations for each device on board).

As to claims 143, 145, and 158, the housing of Culbertson is modified from a condition in which the housing has a plurality of substantially flush outer sides (see Figure 4).

As to claims 146 and 160, in the device of Culbertson, substantially all components necessary to couple the power generating device (40) to the housing (1) are stored within the housing (cargo bay) (see Figure 1).

As to claims 147 and 161, the housing of Culbertson is a human shelter (see column 6, line 60 - column 7, line 5).

As to claims 154 and 171, Culbertson discloses equipment for remotely controlling and monitoring the power generating devices (see column 7, lines 3-4).

As to claim 169, the power generating devices of Culbertson are inherently coupled to all surfaces of the housing, as set forth above (see page 5, lines 19-23).

***Allowable Subject Matter***

13. Claims 144, 148-150, 153, 159, 162-165, and 168 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2836

14. Claims 172-175 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter:

16. Claims 144 and 159 contain allowable subject matter because none of the prior art of record discloses or suggests a modified standard ISO freight container, in combination with the remaining claimed features.

17. Claims 148 and 162 contain allowable subject matter because none of the prior art of record discloses or suggests coupling a proximal end of at least one adjustable strut to one of the power generating devices and positioning a distal end of the at least one adjustable strut on the ground, in combination with the remaining claimed features.

18. Claims 149, 150, and 163-165 contain allowable subject matter because none of the prior art of record discloses or suggests at least one vertical pole coupled to a corner of the housing, in combination with the remaining claimed features.

19. Claims 153 and 168 contain allowable subject matter because none of the prior art of record discloses or suggests coupling the second array of solar panels to the housing via the first array of solar panels, in combination with the remaining claimed features.

20. Claims 172-175 contain allowable subject matter because none of the prior art of record discloses or suggests the use of a wind power generating device, in combination with the remaining claimed features.

***Response to Amendment***

21. The affidavit filed on October 18, 2006, under 37 CFR 1.131 is sufficient to overcome the Pas reference.

***Response to Arguments***

22. Applicant's arguments, see Remarks, filed August 28, 2006, with respect to the objections to the specification, drawings, and claims have been fully considered and are persuasive. The objections to the specification, drawings, and claims have been withdrawn.

***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patent application publication of Pas (2006/0137348) discloses a similar device.

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

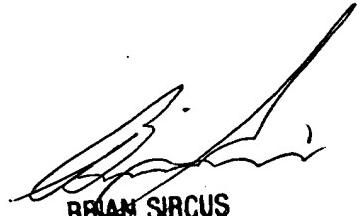
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik



BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800